Math 1111: Cryptography, Fall 2019
Podcast – Historical Crypto

In this audio project, you'll describe the origin, use, influence, and mechanics of a code or cipher of your choice. There are many codes and ciphers we won't have time to explore in detail in this course. This project will provide you with a chance to explore a piece of the history of cryptography that interests you personally—and to share that exploration with an audience beyond the course.

Your project will take the form of a 10-to-15-minute episode of a class podcast called One-Time Pod on the history of cryptography. Your podcast episode should be interesting and accessible to a general audience, which means you'll need to find ways to engage your audience and to explain the mechanics of your chosen code or cipher (enciphering, deciphering, cryptanalysis) in ways your audience can understand.

This assignment will require some research on your part, perhaps even going to the library to get a book or two. (There are only two copies of *The Codebreakers* by David Kahn in the library, so you might want to hurry.) You'll need to submit show notes along with your podcast episode, and you should cite your sources in those show notes.

You'll be graded on both the content of your podcast episode, as well as your effectiveness as a storyteller. See the rubric for more details on assessment.

PLANNING

During class on Monday, October 7th, we will introduce the podcast assignment, discuss what makes this kind of audio storytelling effective, and look at some technical tools for creating podcasts.

Following that class, you'll need to **select a topic** for your podcast and get it approved by me. Just email me your topic when you think you have it. For topics ideas, see our Diigo group, our history of cryptography timeline, and the essays that prior students wrote for Professor Holly Tucker's blog *Wonders & Marvels*. If you have questions about topics or need help finding a topic, please ask.

Please note: Topics addressed in the 2017 and 2018 episodes of One-Time Pod are off limits for this assignment.

Once you have a topic, you'll need to do research on your selected code or cipher. As noted above, the library is your friend. There are lots of good books on the history of cryptography in the Central Library. If you use online resources, please be sure you're using credible ones. If you have questions about what makes a credible resource, please ask.

You'll also need to think of a creative, compelling, and accessible way to tell the story of your selected code or cipher in audio form. We'll do some group brainstorming in class on the 7th, based on our listening to episodes of *99% Invisible* and *The Memory Palace,* but feel free to brainstorm with classmates or run ideas by me.

Based on your research and brainstorming, an **outline and annotated bibliography** (including at least four credible sources, each with a citation and 2-3 sentences about how the source will be useful) for your podcast episode is due at the start of class on Wednesday, October 16th. Please send your outline and bibliography to me via email and bring a print copy to class. We'll spend some time in class workshopping the outlines, and I'll give you some feedback directly about your podcast plans.

A **full script** for your podcast is due at the start of class on Monday, October 21st. This time, I'll ask you to submit your scripts via Brightspace and bring hard copies to class. We'll workshop your scripts during class that day.

PRODUCTION

That will give you time to record and edit your podcast episode. Feel free to use whatever audio production tools you're comfortable with. If you're not sure where to start, see [these resources](#) from the Center for Teaching's educational technologist, Rhett McDaniel. It's surprisingly easy to record audio using the voice memo app on your phone, then edit that audio in the free open source tool [Audacity](#).

Your podcast episode is due as a 10-to-15-minute MP3 file via Brightspace by the start of class on Wednesday, October 30th. In addition to the MP3 file, you'll need to submit two other documents:

- Show notes consisting of a description of your episode suitable for posting on WordPress, along with your references in APA format
- A brief (200 to 400 word) producer's statement, in which you reflect on the choices you made creating your podcast episode

Student-produced podcast episodes that are of sufficient quality for public listening will be posted to One-Time Pod. I'll share the podcast with my Twitter network, and you're encouraged to share it with your social networks, too. The episodes with the most plays and most likes by the end of the semester will earn a few bonus points on this assignment.